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EVALUATING THE IMPACT OF THE COMMON AGRICULTURAL POLICY ON THE DECLINE OF MINERAL FERTILIZER USE IN EUROPEAN FARMING SYSTEMS

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Abstract: Mineral fertilizers, Agri-environmental indicators, Common Agricultural Policy (CAP), Sustainable agriculture, Environmental impact In recent years, a clear trend has been observed in the reduction of mineral fertilizer consumption used in agriculture, amid growing concerns for environmental protection and the sustainable use of natural resources. This evolution is closely linked to the agri-environmental indicators established under the Common Agricultural Policy (CAP), which aim to reduce the negative impact of agriculture on soil, water, and biodiversity. The decrease in the use of mineral fertilizers is driven by several factors: the promotion of sustainable farming practices, the adoption of precision technologies, the increasing awareness among farmers of the effects of nitrate pollution, as well as the financial incentives provided through the CAP's agri-environment-climate measures. These measures reward farmers who reduce the use of chemical substances while promoting the use of organic fertilizers or crop rotation to maintain soil fertility. In this paper, the authors analyzed the consumption of mineral fertilizers within European agriculture. Agri-environmental indicators such as nitrogen and phosphorus consumption, groundwater quality, and the state of biodiversity reflect the progress achieved. The reduction in mineral fertilizers directly contributes to achieving the objectives of climate neutrality and the protection of rural ecosystems, supporting the transition toward a more green, balanced, and resilient European agriculture.

European Agriculture



Overall goal:
Sustainable farming



Common Agricultural Policy



Environmental
measures



Financial incentives
Long-term planning

Impact on Environment



Reduced nitrogen
pollution



Improved soil health

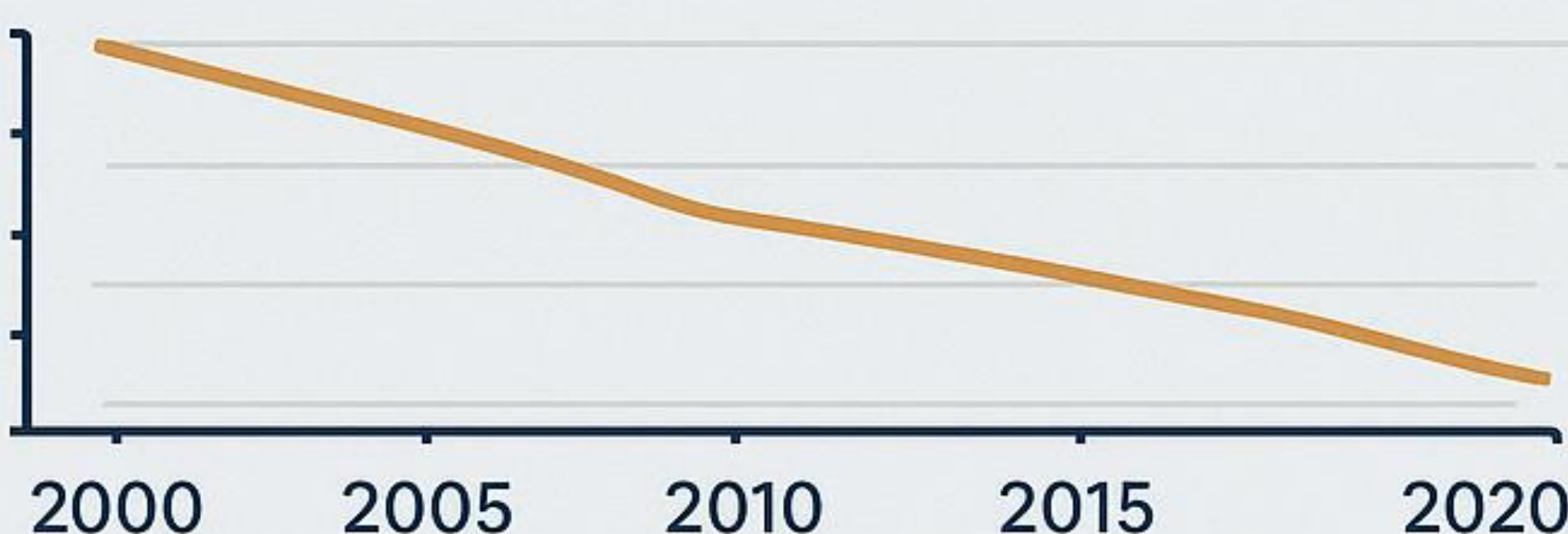


Enhanced
biodiversity

Trend in Mineral Fertilizer Use



Mineral
fertilizer use



Conclusions

The Common Agricultural
Policy has played a
significant role in reducing
mineral fertilizer use

Contributes to more
sustainable farming practices
across Europe